WHAT IS CLAIMED

Claim 1. Apparatus for self-clearing of clogs developed between adjacent ends of downstream and upstream conveyors adapted to carry products thereon in the course of transfer of the products past a gap defined between the conveyors, comprising

a shield disposed between the adjacent ends of the conveyors and adapted to cover less than all of the gap between the conveyors and having a proximal side edge disposed adjacent the end of the downstream conveyor, thereby defining an opening for the discharge of debris associated with the products being transferred between the conveyors through said opening,

means mounting said shield for selected degrees of covering relationship to the gap between the conveyors, said means biasing said shield toward a position of maximum covering of the gap while permitting automatic movement of said shield toward a position of reduced covering of the gap as a function of the application of a force against said shield occasioned by the initiation of a clog by debris associated with the products being transferred between said shield and the downstream conveyor.

Claim 2. The apparatus of Claim 1 wherein said means mounting said shield comprises shaft means rotatably mounting said proximal side edge of said shield across the width of the gap, said width being measured substantially perpendicular to the forward direction of movement of the downstream conveyor.

Claim 3. The apparatus of Claim 2 and including hinge means mounting said shaft for hinged movement generally laterally between the adjacent ends of the conveyors and within the gap.

Claim 4. The apparatus of Claim 2 and including means biasing said hinge means to position said shield toward a position of maximum covering of the gap.

Claim 5. The apparatus of Claim 2 and including means for receipt of opposite ends of said shaft for guiding and limiting the permissible hinged movement of said shield.

Claim 6. Apparatus for the preferential separation of debris from wood logs being conveyed from a first location to a chipper comprising

a downstream conveyor for receiving the logs and debris,

an upstream conveyor onto which said logs are transferred prior to their introduction to the chipper,

said downstream conveyor having a discharge end and said upstream conveyor having a receiving end, said ends of said conveyors being disposed adjacent one another and defining an open gap therebetween,

a shield disposed between said adjacent ends of said conveyors and adapted to cover less than all of said gap, said shield including a proximal side edge disposed adjacent said end of said downstream conveyor, thereby defining an opening for the preferential discharge of debris through said opening,

means mounting said shield for selected degrees of covering relationship to the gap between the conveyors, said means biasing said shield toward a position of maximal covering of the gap while permitting automatic movement of said shield toward a position of reduced covering of the gap as a function of the application of a force against said shield

occasioned by the initiation of a clog by the products being transferred between said shield and the downstream conveyor.

Claim 7. The apparatus of Claim 6 wherein said means mounting said shield comprises shaft means rotatably mounting said proximal side edge of said shield across the width of said gap, said width being measured substantially perpendicular to the forward direction of movement of said downstream conveyor.

Claim 8. The apparatus of Claim 7 and including hinge means mounting said shaft for hinged movement generally laterally between said adjacent ends of said conveyors and within said gap.

Claim 9. The apparatus of Claim 8 and including means biasing said hinge means to position said shield toward a position of maximum covering of said gap.

Claim 10. The apparatus of Claim 8 and including means for receipt of opposite ends of said shaft for guiding and limiting the permissible hinged movement of said shield.

Claim 11. A method for the preferential separation of debris from wood product being conveyed via multiple conveyors from a first location to a chipper comprising

disposing the multiple conveyors with respective ones of their ends disposed in-line and adjacent one another to define a gap therebetween through which debris may pass via gravity,

selectively covering portions of said gap against the discharge of non-debris being transferred between the conveyors,

automatically adjusting the selection of the covering of said gap as a function of the undesired collection of debris and/or wood products within the non-covered portion of said gap to thereby enhance the passage of debris through said gap while minimizing the passage of desirable wood product through said gap.

Claim 12. The method of Claim 11 and including the step of biasing the selection of covering of said gap toward maximal coverage of said gap while still providing for the preferential passage of debris through said gap.